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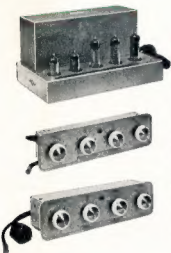
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All Amateurs are urged to keep these frequencies clear during, and for a period of 15 minutes after, the official broadcasts.

VK3WI: Sundays, 1100 hours EST, simultaneously on 3575 Kc., 7146 Kc., and 145.0 Mc. Intra-state call-backs taken on 7080 Kc.

VK3WI: Sundays, 1630 hours EST, simultaneously on 3575 and 7146 Kc., 51.016 and 145.25 Mc. Intra-state hook-ups taken on 7135 Kc. Individual frequency checks of Amateur Stations given when VK3WI is on the air.

VK4WI: Sundays, 0900 hours EST, simultaneously on 7146 Kc. and 14.343 Mc. Intra-state hook-ups taken on 7105 Kc.

VK3WI: Sundays, 0900 hours CAT, on 7146 Kc. Intra-state hook-ups taken on 7125 Kc. Frequency checks given when VK3WI is on the air and also by VK3MD by arrangement.

VK6WI: Sundays at 0930 hours WAST, on 7146 Kc. Intra-state hook-ups taken on 7085 Kc.

VK7WI: Sundays at 1000 hours EST, on 7146 Kc. and 3575 Kc. Intra-state hook-ups taken on 7115 Kc.

EDITORIAL

★

Extraordinary Meeting of W.I.A. Federal Council

The Federal Council of the Wireless Institute of Australia held an Extraordinary Meeting in Melbourne on Easter Saturday, April 16. The single agenda item was "to discuss the Final Acts of the Administrative Radio Conference of the International Telecommunications Union, Geneva 1959, and to resolve the future policy of the W.I.A."

The Geneva Conference completed its work last December, the results of which, if implemented in May 1961, will deprive the Australian Amateur Service of 100 Kc. on the top end of the 80 metre band, 50 Kc. on the top end of the already severely restricted 40 metres band, and unsatisfactory variations in the v.h.f. bands. The Delegation withdrew a further proposal to reduce the 20 metre band by 100 Kc. For a country whose Administration has always been so outspoken in telling this Institute that "it would look after the interests of the Amateurs," the result is completely incompatible and incomprehensible.

Furthermore, the proposed reductions in the bands allocated to the Amateur Service in Region III, are, in part, inconsistent with statements made by the Hon. C. W. Davidson, Postmaster-General of the Commonwealth of Australia, and other Officers of his Department, who, last year before Honorable Members of both Houses of Parliament, gave assurances that Australia would make no unilateral agreements if the majority of member nations were in favour of maintaining the status quo on Amateur band assignments.

That these assurances were not carried out is now quite clear, there-

fore the Australian Amateurs have every reason to consider that they have been given a raw deal. Already Honorable Members have again raised the matter before the Postmaster-General in Canberra asking for reason why these assurances were not carried out and pointing up the Department's lack of concern for the future of the Australian Amateur Service.

For the consideration of the Federal Council at its Extraordinary Meeting, the Federal Executive prepared a draft 70-page document compiled from the working documents of the Geneva Conference and the memos from John Moyle's note book. In this document the entire story of the events leading up to, and the results of, the Geneva Conference are detailed. Australian Amateurs will ultimately be able to read the story for themselves.

This report will become an historical document for it points up the problems we have to face in the future in our efforts to protect the few hundred kilocycles we have left in the bands from 2 to 27 Mc. It highlights the low priority given to the future expansion of the Amateur Service as compared to that afforded by other countries. At the time of going to press the outcome of the Extraordinary Meeting of the Federal Council was unknown but members can obtain information on the deliberations from their Division's Federal Councillor in due course.

When can we expect a priority equivalent to other countries in which the technical problems associated with the use of the frequency spectrum are so much greater?

FEDERAL EXECUTIVE.

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SPECIFICATIONS:

RF Power Handling Capabilities	One full kilowatt.
Input and Output Impedance	50 and 75 ohms.
Power Requirements	None externally.
Band Coverage	160 through 2 metres.
Meter	100 microamperes, full scale.
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T.V.I. DIAGNOSIS CHART

J. E. ANDERSEN,* VK3ZFO

Connect transmitter to dummy load, making sure there is no radiation from the load.

QRM Clears.

Tx itself is adequately adjusted and shielded. Harmonics generated, but radiated only from aerial.

Correct by fitting Low Pass Filter.

QRM Clears.

All clear.

COMMENTS

If nothing works, reduce power and try again, or use s.s.b. (You could always give in and watch t.v. yourself.—Editor)

There are a few points which it may be helpful to bear in mind when tracking down the frequency of the interfering radiation.

(1) For 6 mhz band only, it may be useful to try traps at 50 and 200 Mc. at the t.v. antenna terminals initially before proceeding down the Chart. Channel 2 is close to 50 Mc. which can cause serious front-end overload, and the fourth harmonic (200 Mc.) is near Channel 9 sound carrier.

(2) With t.v. receivers using incremental tuners: Any radiation in the t.v. band or any heterodyne into the band can cause interference on all channels due to the direct coupling involved.

(3) Strong b.c./s.w. stations carriers beating with the Amateur station's carrier can create a heterodyne in a t.v. channel, e.g. f.m. station on 95 Mc. and a Amateur station on 28 Mc. gives heterodyne on 67 Mc.—within Channel 2. The cure here is to trap either station at t.v. antenna terminals.

(4) Shielding and filtering are last resort measures. It is far better to arrange for minimum unwanted output in the first place, by running exciter stages at as low a level as possible, and by careful circuit design and adjustment to arrive at optimum drive conditions. One reason why s.s.b. causes little t.v.i. is that generally all stages are low-level Class A (no grid current) and carefully set up.

No Amateurs should modify a neighbour's t.v. or h.c. receiver. If the set is at fault, it is the owner's responsibility. Any adjustments on your part could lead to many future difficulties.

Keep the P.M.G. informed of any steps you take, particularly if they are aware of the interference.

QRM Reduces.

In either case radiation is from tx itself. Using g.d.o. (as absorption wavemeter), locate frequency. By removing tubes, isolate stage of main radiation. Check this stage for correct adjustment (keep in mind the harmonic suppression of link coupled stages). Work forward to p.a. Shield only if necessary. When clear proceed down.

QRM Clears.

QRM Reduced.

Tx has some spurious output. Leave Filter in. Check for excess grid drive, maintain grid current at minimum. Remove any capacity coupling to final. (Preferably from other stages also.)

QRM Remains Unchanged.

Tx has no spurious output.

Tx now OK.
Disconnect T.V. Feeder Line.
Run (a) Carrier Only.
(b) Modulated or Keyed.

QRM Clears.

Interference enters via t.v. set aerial.

QRM Reduced or Unchanged.

Possibly entering via a.c. mains or i.f. pick-up. May be reduced by Mains Filter at tx and/or t.v. set. If no result, refer to T.V.I. Committee or P.M.G.

Try Traps on T.V. Antenna Lead at possible interference frequencies.

QRM Clears.

Tx Rev. sensitive to spurious radiation of a specific frequency or frequencies. Leave traps in permanently.

QRM and Picture attenuated only when trap tuned to t.v. channel.

Radiation due to non-linear detectors (rectifiers) in area. Bond all drain pipes, check earthing of metal objects.

Remember your R.I. can be your best friend if you are experiencing t.v.i./b.c.i., so keep him informed.

Do not waste time. Delays in locating and curing the fault will antagonise everyone concerned probably quite unnecessarily. Above all, maintain good relationship with the complainant.

(It is also a wise precaution to turn off the tx and see if the interference still continues. Instances have occurred where the local oscillator of a b.c. set or converter has been the offender.—Editor.)

(Acknowledgment is made to the R.S.G.B. who so readily made data available. The above Chart has been based upon the R.S.G.B. T.V.I./B.C.I. Chart.)

* Secretary, VK3 T.V.I./B.C.I. Committee,
26 Adey Avenue, Kew, Victoria.

SYNCHRONOUS COMMUNICATION

PART TWO

M. R. HASKARD,* VK5ZBH

(ii) COMPARISON BETWEEN A.M., S.S.B. AND D.S.B.S.C.

In normal theoretical comparisons, an ideal s.s.b. signal is taken so that the results obtained are the upper limit for s.s.b. rather than the average practical results. In this paper it is hoped to show how things have to be modified to obtain practical results.

(a) Bandwidth Conservation

The first advantage of s.s.b. which comes to mind is that only half the bandwidth of a.m. or d.s.b.c. is used. For an ideal s.s.b. system this is true, but in practice this is not so. To obtain an ideal s.s.b. signal we must have a very stable oscillator (better than 1 part in 10^6)¹ for once the frequency shift between the transmitter "carrier frequency" and local oscillator exceeds about 25 cycles/sec., the intelligibility falls off rapidly. We can only achieve this stability by using frequency synthesis techniques and this leads to large complex and expensive equipment. For many normal communication systems, we have to transmit some carrier and/or allow a slightly larger bandwidth for drift.

In addition to the above, with s.s.b. the sideband not transmitted is suppressed by the order of 30 to 60 db. This may sound a considerable amount, but in certain circumstances it can still be insufficient. Consider the following example. We have a powerful fixed s.s.b. station and a small mobile s.s.b. station, the latter working on a frequency which coincides partly or wholly with the frequency of the suppressed side band of the fixed station. It will be found, that during abnormal propagation conditions or when the two stations are in the same area, the mobile station will be unable to hear its base station. The reason for this is blocking caused by the fixed station. This can be overcome only by careful frequency allotting, and this is not always possible in practice.

Thus we see that unless we use extremely complicated equipment, a 2:1 bandwidth saving can only be achieved in theory.

If it is important to save on bandwidth to help overcome crowding of the high frequency spectrum, then it will be far better to employ other types of communication such as frequency shift keying, where bandwidth savings of more than 10:1 are possible.

(b) Signal-to-Noise Ratios (S/N)

Here again, it is usual to calculate the signal-to-noise ratio only for the theoretical case. In Table 1, the signal-to-noise ratios are given when equal average power for the three systems is taken as the basis for comparison.

(Equal peak powers were not used as basis for comparison, for if a s.s.b. system is modulated with a waveform which has a fast rise time, we require an infinite peak power; i.e. the ratio of average power to peak power is

dependent upon the modulating waveform. In practice, we find a system is limited to a certain finite peak power, thus we see that using equal peak powers will not give a true practical result.)

Calculations were made for three types of detectors, using any arbitrary modulating signal. We see that for an a.m. system, a linear detector gives a S/N ratio 3 db. down on either a square law or product detector, and that we lose signal power by having to transmit a carrier. Because of this, both d.s.b.c. and s.s.b. systems give better signal-to-noise ratios. It may be noted that the 9 db. often quoted for a s.s.b. system above an a.m. system, does not

I emphasise again that in these calculations we have taken an ideal s.s.b. system. If now we allow for the transmission of a carrier and/or the increase in bandwidth which drift will involve the signal-to-noise ratio for a product or square law detector of the form

$$(S/N)_{s.s.b.} = \frac{2(P_{1s} - S_s^2)}{dN}$$

As expected, our signal-to-noise ratio depends greatly on S_s , the ratio of increase in bandwidth. For a practical case,¹ if we have a d.s.b.c. system with an audio bandwidth of 3.5 Kc., then our s.s.b. system will be of the order of 4.5 Kc. (i.e.) $d = 1.3$, and our s.s.b. signal-to-noise ratio will be ap-

System	Linear Detection	Square Law Detection		Product Detection
		General Formula	For Large L	
A.m.	$\frac{(P_{1s} - \frac{1}{2} S_s^2)}{N}$	$\frac{2L^* (P_{1s} - \frac{1}{2} S_s^2)}{N (P_{1s} + L^*)}$	$\frac{2 (P_{1s} - \frac{1}{2} S_s^2)}{N}$	$\frac{2 (P_{1s} - \frac{1}{2} S_s^2)}{N}$
D.s.b.c.	—	$\frac{2L^* P_{1s}}{N (P_{1s} + L^*)}$	$\frac{2 P_{1s}}{N}$	$\frac{2 P_{1s}}{N}$
S.s.b.	—	$\frac{L^* P_{1s}}{N (P_{1s} + \frac{1}{2} L^*)}$	$\frac{2 P_{1s}}{N}$	$\frac{2 P_{1s}}{N}$

Table 1.—Signal-to-Noise Ratios for the Three Systems.

appear here. This was calculated for a very special case, i.e. equal peak powers and sinusoidal modulation. As here one could have easily taken equal average powers and a different modulating signal and so not obtain a 9 db. increase in S/N for s.s.b. In practice it is seldom that 9 db. does occur, since speech is not just a single sinusoidal wave.

We also find that s.s.b. has no advantage over d.s.b.c., as may be expected at first sight.

List of Symbols

- a.g.c. = automatic gain control.
- a.m. = amplitude modulation.
- c(t) = carrier function.
- c.w. = continuous wave.
- d = the percentage increase in bandwidth.
- delta = small error in phase between the incoming signal and the local oscillator.
- d.s.b.c. = double sideband suppressed carrier.
- E_s = screen grid potential.
- f.m. = frequency modulation.
- L = local oscillator signal's peak amplitude.
- M(t) = modulating function.
- n = class C efficiency.
- N = average noise power.
- p = modulating signals frequency.
- p.m. = phase modulation.
- P_{1s} = radio frequency signal power into the detector stage.
- S/N = signal-to-noise ratio.
- S_s = carrier peak amplitude.
- s.s.b. = single sideband.
- (1/T) = the attenuation factor of the signal power during transmission.
- w = carrier frequency.

proximately 1 db. down on our d.s.b.c. system signal-to-noise.

The s.s.b. signal-to-noise ratio increases as the carrier is suppressed more and more. However, once the carrier is suppressed 20 db. or more, there is little increase in the signal-to-noise ratio. The 20 db. also applies to a d.s.b.c. system.

If we receive a s.s.b. signal on a synchronous receiver, then, as our bandwidth is the low pass filter mirrored about the carrier, we still have the same noise bandwidth for s.s.b. as we do for d.s.b.c., since we cannot lower the cut-off frequency of the low pass filter. Thus we have here that

$$(S/N)_{d.s.b.c.} = 2(S/N)_{s.s.b.}$$

Or, if we receive s.s.b. on a square law detector, then for large signals we achieve the same signal-to-noise ratio as we can in a synchronous system, but when we have a small input signal we can no longer forget some of the noise terms of a square law detector that we ignored before. Thus for small signal inputs our signal-to-noise ratio decreases. Also because of the square terms in a square law detector, we have distortion which does not occur in a product detector.

One may argue that we have also taken the optimum case for d.s.b.c., i.e. correct phasing, and this may not occur in practice. For a normal square law detector this is correct, but for a synchronous detector, which we will be using, we have the phase locking device, which locks the local oscillator to the signal so that we do have optimum phasing. Even if noise upsets the phase loop slightly and there is a phase error (equals delta), then as pointed out earlier, the output from the receiver falls off in a cosine (delta) fashion and

* 3 Te Anau Ave., Prospect, South Aus.

for small deltas, $\cos(\delta)$ equals approximately 1.

Thus we can only say that the signal-to-noise ratio of a d.s.b.c. can be slightly better than that of a s.s.b. system, but never worse. Both d.s.b.c. and s.s.b. systems have signal-to-noise ratios far better than that of a conventional a.m. system.

(c) Clipping

If we analyse the envelope of speech, we find that it is very "peaky". When we fully modulate a transmitter it is these peaks which limit the amount of modulation so that for, say, an a.m. system, where we 100% modulate on peaks, our average modulation is only about 30%. To overcome this, we can do several things, the simplest being to peak clip and filter our modulating signal. This clipping also gives us a type of automatic gain control effect so that our average percentage modulation remains almost constant.

If we modulate our transmitter with speech, then most of the energy is in the lower frequencies. From articulation versus cut-off frequency charts (for a low pass filter) we know it is useless to transmit frequencies below 200 cycles/sec. and greater than 6.0 kc./sec. (for speech), therefore we must attenuate the low frequencies. To keep our radio frequency bandwidth down to about 7.0 kc., we must have an upper frequency limit of about 3.5 kc. for our modulator. This still gives us an articulation of about 80%. When we clip our waveform we produce harmonics, and to eliminate the high frequency harmonics we must have a low pass filter with a cut-off frequency of 3.5 kc.

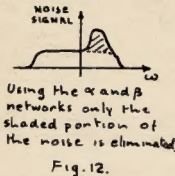
It has been found that about 8 db. of clipping increases the "talk power" considerably without decreasing the intelligibility and up to 24 db. of clipping can be used.

Thus we can see that by simple clipping we can modulate deeper, and so obtain added "talk power". This can be done for a.m. and d.s.b.c., but we find for s.s.b. that any waveform, which has a fast rise time, gives rise to infinite peak power. To overcome this, we must introduce a more complicated circuit so as to limit our peak power. This is a disadvantage for a s.s.b. system.

(d) Interference and Noise Rejection

Although under ideal conditions s.s.b. can give as good a signal-to-noise ratio as a d.s.b.c. signal, we find that by having an extra sideband present in the latter we can eliminate some noise. We can easily imagine our d.s.b.c. signal as two s.s.b. signals, i.e. we have a frequency diversity system. If we have noise or interference from an adjacent station in one sideband we could then receive the other sideband and so obtain noise or interference-free reception. In a synchronous receiver we find that signals in the 1 and 3 channels (Fig. 6) due to our noise or interference (in one sideband) are 90° out of phase (Fig. 7), and so by introducing our alpha and beta networks to give a total phase shift of 90° we can cancel out the noise or interference from this one sideband. By switching we can select the sideband from which we reject the noise.

In practice, however, there is noise in both sidebands and we can eliminate only the asymmetrical portion of the noise (Fig. 12). The reason is that a narrow band of noise selected from white noise approximates an a.m. signal. Symmetrical noise therefore gives an output from the receiver similar to any a.m. signal instead of cancelling out as is the case for noise existing in one sideband only. For a very large background noise the receiver may not track, and so the phase loop will have to be disconnected and therefore the receiver must depend upon the stability of the local oscillator.



By keeping our two sidebands, therefore, we have the advantage of being able to reject interference and some noise from one sideband.

(e) Selective Fading

At first sight it would appear that s.s.b. will suffer less from selective fading than d.s.b.c., because it has a narrower frequency bandwidth. However, if we examine a d.s.b.c. signal, to obtain poor reception owing to fading, the two sidebands must be reduced in amplitude and/or the phase changed in such a way that they are in phase opposition. For this reason complete drop out is less likely to occur with d.s.b.c. If, however, the amplitude and phase of a d.s.b.c. signal do change, then the local oscillator in a synchronous receiver also changes, and in such a way as to attempt to compensate for the first change, thus improving things.

These remarks are borne out by theory and experiments carried out by John P. Costas in U.S.A., who found that the d.s.b.c. system was never worse than the s.s.b. system (over the same path).

(f) Economies

Previously we have seen that both d.s.b.c. and s.s.b. systems are far superior to an a.m. system. However, an a.m. system has the advantage that its circuitry is the simplest of the three systems, and therefore is the least expensive to construct. On the other hand, both a s.s.b. transmitter and receiver are complex, and therefore expensive and more difficult to operate. For example, in the transmitter we need at least one high power linear amplifier, and if wishing to modulate the transmitter with waveforms with fast rise times, we will need complicated circuitry to limit our peak power. To ensure good frequency stability, we

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can use either frequency synthesis, which is extremely complex, or transmit a suppressed carrier, which is usually generated in a separate circuit and thus means additional circuitry.

In between these two, we have a d.s.b.s.c. system. The transmitter is even simpler than an a.m. transmitter, but the receiver is as complex as that used for s.s.b.

There is another advantage which d.s.b.s.c. has over s.s.b. If an a.m. system is to be improved, it is much

simpler and cheaper to convert it to a d.s.b.s.c. system than to a s.s.b. system.

Hence we have shown that a d.s.b.s.c. system is at least as good as a s.s.b. system in all the cases that we have considered in this theory. In fact, when we modify the theory to include practical limitations, we find that a d.s.b.s.c. system may even be superior to a s.s.b. system.

A summary of these comparisons is given in Table 2.

Characteristics	System		
	A.m.	D.s.b.s.c.	S.s.b.
Bandwidth	Twice the highest audio frequency.	Same as for a.m.	Half the bandwidth (or more) of an a.m. system. Depends on the complexity of the system.
S/N (for equal average powers)	Poorest S/N is for a linear detector while for a product or square law detector it is 3 db. up on the linear detector. Signal power wasted by transmitting the carrier.	Signal to noise ratio better than a.m. signal to noise ratio.	Slightly worse than d.s.b.s.c., but much better than a.m.
Clipping	Can increase the "talk power" by simple clipping.	Same as for a.m.	Simple clipping cannot be employed because of r.f. peak power increase.
Interference and Noise Reduction	With a synchronous receiver you can reject noise or interference from one sideband.	Same as for a.m.	No interference rejection, but interference is reduced because of the narrower bandwidth.
Selective Fading	Causes distortion & a.m. subject to fading.	Distortion but less chance of drop out than s.s.b. signal.	Better than a.m., of the same order as d.s.b.s.c.
Economics	Cheapest system, as circuitry is simplest.	Medium cost as transmitter simple but receiver as complex as s.s.b. receiver.	Most expensive of the three systems.

Table 2.

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Mo. E. AUSTRALIA — W. EUROPE S.B. Mo.

45	0	2	4	6	8	10	12	14	16	18	20	22	24	45
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E. AUSTRALIA — W. EUROPE I.L.

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E. AUSTRALIA — MEDITERRANEAN

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E. AUSTRALIA — N.W. U.S.A.

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E. AUSTRALIA — N.E. U.S.A. S.B.

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E. AUSTRALIA — N.E. U.S.A. I.L.

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E. AUSTRALIA — CENTRAL AMERICA

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E. AUSTRALIA — S. AFRICA

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E. AUSTRALIA — FAR EAST

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W. AUSTRALIA — W. EUROPE

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W. AUSTRALIA — N.W. U.S.A.

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W. AUSTRALIA — N.E. U.S.A.

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W. AUSTRALIA — S. AFRICA

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W. AUSTRALIA — FAR EAST

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THE HARD WAY

I.T.U.—Question in Senate

The following is an extract from Hansard of a question, re I.T.U., asked by Senator Hannon on 15th March, '60:

Senator Hannon.—I ask the Minister representing the Postmaster-General the following questions: Will the Minister at an early date lay on the table of the Senate the draft convention agreed at the recently completed International Telecommunications Union Conference at Geneva, together with any subscriptions to the main document and the names of states appending them? Will he give an undertaking that the convention will not be ratified by the Executive without an opportunity being given to the Senate to debate it? Will he give an assurance that pending the discussion of the convention by the Senate, no departmental action will be taken by way of allocation of frequencies or the like, which would amount to a breach of the undertaking given with respect to this matter by the Government and the department to members of all parties in May, 1959? Is it not a fact that Australia, as represented by the Postmaster-General's Department, was the only English-speaking country at the Geneva conference which failed to vote on the side of Britain and the United States of America in favour of a resolution designed to protect agreed amateur radio frequencies from unlawful use by international radio pirates? Is it not a fact that in this vote Australia has had the dubious support of the Communist-bloc countries?

Senator Sir Walter Cooper.—I should like to say a word about the question which relates to the taking of departmental action. I cannot give an assurance that permission will be given for the documents to be distributed prior to their coming before the Parliament. I remember quite well the meeting about which the honorable senator spoke; it was held, I think, in May last year. I feel that the Postmaster-General would stand by what he said at that meeting. I ask the honorable senator to place the remaining questions on the notice-paper. — . . .

HAMADS

The Publications Committee is pleased to announce that following their representations to the Victorian Council of the W.I.A., the P.M.G. Department has agreed to the use of Call Signs in connection with "Hamads". In all future issues of "A.R.", advertisers need only show their Call Sign (if their address is correct in the Call Book), and if desired may also give their phone number.

The use of Amateur frequencies for the purpose of the sale of equipment is not permitted by the P.M.G.

Hamads may only be used to advertise equipment which is the personal property of the advertiser, who is a member of the Wireless Institute of Australia.

We are very pleased that the P.M.G. have agreed to permit the use of Call Signs in Hamads and we take this opportunity to thank them for their co-operation.

★

Have you any surplus gear and need the circuit diagram? Saw a new Handbook in McGill's technical book section which gives a lot of details regarding equipment available in Australia. Was told copies are limited.

watts input to the receiver was considerable and all ideas of using more than 250 volts for the transmitter were discarded. It was realised that it would be necessary to design a transmitter and receiver with economy of power (human power) as the first consideration. A rig was then constructed as follows:

Transmitter: 6AC7 crystal oscillator (Pierce), VT501 power amplifier (8w. input), EF36 and 7C5 plate modulator.

Receiver: A previously built portable receiver was modified to ECH35 converter, EF39 i.f. amplifier, EF36 bias detector, and 6J5 output into a loud-speaker. The transmitter was fitted into the space formerly occupied by the dry batteries.

The rig was first operated and tuned up on a.c. power and was then given a try on the generator. It was found possible on "Receive" to turn the generator with one hand while the other was used to tune the receiver, but on "Transmit" both hands were required for the 50 watts input to the transmitter plus the receiver heaters.

As Field Day of 1960 drew near, attempts were made to obtain an assistant to help in the operation but when winding the handles was mentioned nobody showed any interest and it was necessary to play a lone hand on the day. Eventually a site was selected between two trees at 11 a.m. and after some trouble with angled fishing lines, these were shot over the trees with a powerful catapult (shanghai), a folded dipole was pulled up, and operation commenced about midday.

When erecting the antenna the pencil brought for filling in the log was lost and the log had to be written on a large sheet of cardboard with a charcoal stick from a nearby burnt tree. This added to the difficulty of operation as in any case it was necessary to stop generating to make an entry in the log. Nevertheless, eleven contacts were made with signal reports averaging 8 in about 24 hours of intermittent operation. At the end of this time the arms were so weary that the station was closed down and packed up before the end of the Contest.

Altogether it was an interesting day and the following conclusions were drawn re hand generator operation:

One man operation is possible, but one man cannot supply 50 watts input continuously for more than 15 to 20 minutes.

Two men or preferably three would be required to maintain intermittent communication as in Field Day operation or emergency work for periods of over two hours.

There would obviously be no worries as regards batteries running down.

The total weight of the rig is less than that of the average 6v. storage battery, the heaviest part being the generator at 19 lbs., and two men could carry the complete rig a mile or more into country inaccessible to motor vehicles.

—J. A. Gazeard, VK5JG.

THERE had always been an urge to have a portable rig at VK5JG, so that when about ten years ago a couple of I.F.F. generators were acquired, plans began to take shape and after about two years the rig was completed.

The generators, rated at 18 volts input and 450 volts output, were found to give 250 to 300 volts output with an input of 12 volts, which was the voltage of the car battery, and with the inputs in parallel and the outputs in series, 250 volts were available for the receiver and the earlier stages of the transmitter, and 500 volts for the final.

The transmitter consisted of a v.f.o. with a 1625 final, screen modulated by a 12J5. The receiver was a simple superhet with an r.f. stage and was bandswitched to Amateur bands only.

The outfit was first tried on the Field Day of 1952 and operated successfully for a short period. The car battery at that time was nearing the end of its life and a couple of 6 volt batteries were borrowed to run the rig.

Next year the rig was again successfully operated on the Field Day but again it was necessary to borrow batteries because late in 1952 a new car with a 6 volt system had been purchased.

Although the urge to operate portable on Field Days still persisted, the trouble in borrowing and transporting batteries discouraged further attempts. The purchase of a nickel-iron type battery which holds its charge and does not deteriorate if left unused was considered but not proceeded with because of the very high cost. The portable receiver was found to be more convenient than the main receiver at VK5JG and took over this function.

Round about 1955 a Burke hand generator from disposals was advertised and partly with the idea of operating portable without batteries and partly of curiosity, one was purchased. This generator came complete with a light collapsible bench to which the generator was attached. Sitting astride the bench the generator was driven by turning two handles, one for each hand.

The output was 10 volts 1.25 amps, and 400 volts 70 mA., and the voltage was rigidly controlled by a vibrator in the field circuit, the same method as used in car generators.

After considerable planning on how to use the 10v. for heaters and the 400v. for the receiver, it was discovered that by altering the tension on the vibrator reed with the screw provided, the generator could be set to give 6.3 volts low tension and at this setting 250 volts were obtainable from the high tension. At 6.3 volts it was assumed that 2 to 3 amps. could be available.

The generator was first tried on a small receiver to see whether it caused interference. It was found to be free of commutator hash but the vibrator caused a small amount of noise which could be avoided by turning the generator at just below the speed of voltage control cut-in. However the effort to turn the generator with about 25

OFFICIAL OPENING N.S.W. DIVISIONAL HEADQUARTERS

WIRELESS INSTITUTE GOLDEN JUBILEE PARTY

LATE in 1959 the Council of the N.S.W. Division of the Wireless Institute of Australia was directed by majority vote at a general meeting to acquire a metropolitan or suburban property which could be converted into a Headquarters for the Division. A sub-committee was formed and subsequent to the recommendations of this committee steps were taken to acquire the land and building thereon situated at 14 Atchison Street, Crow's Nest.

The property is located within three minutes' walk of St. Leonard's railway station and is served by other public transport on the nearby Pacific Highway.

The official opening was held on 12th March, 1960, which coincided (plus two days) with the Golden Jubilee of the Foundation Meeting of the Wireless Institute. This historic meeting was held in the Australia Hotel in Sydney on 10th March, 1910.

Guests of Honour at the Official Opening of the newly acquired premises were Wal Hannan (VK2AXH) and John Pike (VK2JF), both of whom had attended the inaugural meeting fifty years earlier. Other guests included many "old-timers" and several Past Presidents of the VK2 Division of the W.I.A.

In such a gathering of "old-timers" the "young squirts" listened with interest (and amazement) as the Methodists reminisced about their early experiments in radio (or wireless as it was then known). From the stories which were related about the early days, it was apparent that these pioneers of Amateur Radio were not always on good terms with the appropriate authorities. It was interesting to learn that the licence fee in those days was

£3! Perhaps a financial wizard may care to calculate how much that amount represents in present-day values!!

Joe Reed (VK2JR) delivered an interesting discourse on his experiments in the early days and related how experimenters "acquired" gear in various ways. Joe and one of his colleagues had an extremely cunning scheme in operation to acquire "disposals" equipment—perhaps when Joe writes his memoirs he will record the details of the scheme. In concluding his talk, Joe stressed the need within our hobby for original research, the need to keep abreast of modern techniques and the need to lend helping hands to newcomers to the hobby.

Wal and John spoke of their experiments in the pioneer days. Mention was made of a receiver employing umpteen stages of r.f. amplification, a detector and another umpteen stages of transformer-coupled audio stages. The receiver was reputed to have "lighted up like a Christmas tree" and operation of the equipment was not unlike playing the Sydney Town Hall organ. Wal spoke briefly of his participation in the Mawson Expedition to the Antarctic and also told how the "arm-twisters" appointed him Secretary of the newly founded Wireless Institute.

Other speakers traced the history of the Institute up till the present. Two points stand out in history of Amateur Radio in this State. One is the matter

of Amateurs not always being in the best harmony and the other point is that of the progress which has been made in this State. (At the time of writing, the VK2 Division is a close-knit organisation with over 1,100 members.)

The President, Dave Duff (VK2EO) eventually restored some semblance of order in the gathering and accompanied by the flashing of lights and the clicking of cameras, Wal Hannan cut the birthday cake which had been baked and decorated by Brenda Whiting.

The partygoers then retired to the committee room where a minute's silence was observed in respect of John Moyle (VK2JU) who had passed on two days earlier. Dave then asked Joe Reed to dedicate a framed photographic copy of the newspaper report of the inaugural meeting which had appeared in the Daily Telegraph during March 1910. In dedicating this copy of the report, Joe spoke whimsically of the "old-timers" wheeling their bath-chairs to Crow's Nest and talking about old times. Fortunately, according to Joe, the bath-chair era is not imminent and like most other Amateurs he lived from "one disposals sale to another" with plenty of time on the air between times.

In closing the function the President, Dave Duff, paid thanks to those who had attended and to those who had tendered apologies. He also thanked the ladies who had looked after the preparation and serving of afternoon tea. These included Mesdames Duff, Beard, Whiting, and Marion Whiting. Thanks were also given to Brenda Whiting for her preparation of the birthday cake.

I.T.U.—Extraordinary Meeting of W.I.A. Federal Council

For general information we publish the following:

If ever there was an urgent reason for the Federal Council to meet together it is Easter 1960!

The Geneva Conference of the International Telecommunications Union has concluded, and as far as the Amateur Service in Region III is concerned it has received a raw deal. There is so much "feeling" about the result that there is only one thing to do and do urgently—hold an Extraordinary Meeting of the Federal Council. This is not a Convention. There will be only one item on the Agenda—"To discuss the final Minutes of the Geneva Conference and plan the policy to be adopted by the Wireless Institute of Australia for the future."

Matters relating to the Geneva curtailment of frequency allocations in the Amateur Service in Region III have already been spoken about in Canberra. Other Amateurs have been taking what they consider to be the right initiative in supporting the proposition that these matters should be handled politically. The New South Wales Division is calling on its members to put the matter before their local Government members.

Much of the information being circulated is far from correct and may be the cause of embarrassing the W.I.A. and the Australian Amateur Service to the point where the harm done can be far in excess of any good. It is, there-

fore, high time that the Federal Council took control of the problem and this can only be done by an Extraordinary Meeting. It's entirely up to your Division, but if you take the advice of this Executive, you will send your Delegate without any more ado.

It will be necessary for a unanimous vote to convene this Extraordinary Meeting. If one Division dissents, the meeting will not be held. As the ex-officio office of the Federal Council, we, Federal Executive, strongly suggest, with every good reason for doing so, that this should not happen. It is to you as an important link in the Divisional set-up of the Wireless Institute of Australia to see that it doesn't and that the Federal Council has this opportunity of discussing a subject which is of such importance that it may well mean the very future existence of Amateur Radio in this country.

The Australian Amateur Service has never faced such a problem before and it is of the utmost importance that the Wireless Institute of Australia takes over properly authorised control of the situation before it is too late. The Federal Council, as the properly constituted authority, must do that—and it must do it now!

All Divisions have indicated their willingness to send a delegate to the extraordinary meeting of the Federal Council of the Wireless Institute of Australia.

OBITUARY

C. T. (CEC.) HORNE, VK8AIK

Cec. passed away early in the month of April. He had served as an officer-bearer in early years in the N.S.W. Division of the Wireless Institute of Australia.

S. (SYD) SMITH, VK8AFS

Syd. had been an Amateur for many years, and was well known on 40 metres. He led 2 metre activity in the Tamworth area and was a keen supporter of W.I.C.E.N. since its inception. Syd. passed away on Tuesday, 3th April, 1960, and is survived by his wife and family.

HORRIE E. (DICK) DICKASON, VK8RR

Dick died from a heart attack on 30th March, 1960. He was for some years living at Armidale, N.S.W. where he conducted a Radio Sales and Repair business. He was very active on the 50 Mc. band and although interested in both h.f. and v.h.f. bands did a considerable amount of operating on this band.

Dick moved to Horsham, Vic., and spent a few years in a radio business and still operated to a lesser extent from that location on both h.f. and v.h.f. bands.

On his return from Horsham he was living at McCrae, where he had not been well for some months, but was going to resume work when he suffered the attack from which he died. Dick leaves a wife and five children.

The sympathy of members of the W.I.A. is extended to the families of the above Amateurs.

1960 National Field Day Contest Results

FEEDBACK

THE Federal Contest Committee has much pleasure in presenting the results of the 1960 National Field Day Contest which surely must be classed as the most successful field day contest conducted in Australia to date. There were 78 entries altogether in the five sections and competition in some sections was very keen. The winners of the various awards are to be congratulated on their fine results which in many cases were achieved under very adverse weather conditions.

As was expected, most interest was shown in the phone section, but it is pleasing to see the support given by listeners in the receiving section and the participation of several Z call licensees. Comments offered by the participants indicate that this year's rules met with their approval generally. Certain it is that the contest offered the utmost in flexibility in that there was something for everybody to contest, either as an individual or as a team, and either at home or in the field. The hours of operation also seem to have suited most contestants.

It is obvious, especially after reading VK3ADL's interesting article in the April issue of "Amateur Radio," that much fun was had by all, to say nothing of the valuable experience gained. The participation shown this year augurs well for a bigger and better contest next year.

AWARDS

Section A—Portable Phone:

VK2ARZ—M. R. Riley	327 pts.
VK3APJ—P. J. Dettman	719 "
VK4OL—A. J. Hansen	147 "
VK5AQ—T. F. Robbins	164 "
VK7TT—T. Tonge	422 "

Section B—Portable C.W.:

VK2ARZ—M. R. Riley	41 pts.
VK3AKN—D. G. Baulch	112 "
VK4ER—R. E. Lees	75 "
VK5XK—A. J. Hewitt	208 "
VK7KA—K. E. Millin	197 "

Section C—Multiple Operator:

VK3OM—R. Fisher	942 pts.
VK3DY—C. J. Tatum	995 "
VK7JB—J. Batchler	485 "

Section D—Fixed Stations:

VK2YN—J. Watt-Bright	510 pts.
VK3AIT—G. C. Traill	405 "
VK4CI—C. E. Cogzell	90 "
VK5OR—B. Bussenschutt	45 "
VK7SM—S. G. Moore	565 "

Section E—Receiving:

WIA-L2159—R. Thomson	315 pts.
BERS-195—E. Trebilcock	530 "
VK4—C. H. Thorpe	255 "
WIA-L5031—C. Hutchesson	770 "
WIA-L7004—R. E. Rogers	610 "

LOGS

Section A

VK2ARZ	327	VK4OL	147
2AAH	240	4UX	111
VK3APJ	719	4HZ	103
3ADW	550	4ER	81
3EZ	335	VK5AQ	164
3AUC	273	5AV	142
3HE	228	5JG	91
3WM	191	5ZBZ	78
3YA	155	VK7TT	422
3YQ	153	7LJ	208
3JO	114		
3AKN	103	Check Logs:	
3OH	80	VK3EM	
3ALJ	73	VK7KA	

Section B

VK2ARZ	41	VK5XK	208
VK3AKN	112	VK7KA	197
VK4ER	75	7LJ	193
4OL	38	7CH	171

Section C

VK3OM	942	VK3WJ	497
3ML	690	VK5DY	995
3APC	698	VK7JB	485

Section D

VK2YN	510	VK3YQ	30
2ASZ	250	VK4CI	90
VK3AIT	405	VK5OR	45
3KC	385	5ZBL	50
3AKN	320	VK7SM	565
3AKZ	230	7KS	370
3AIL	285	7DS	135
3PH	265	7MX	125
3ATP	180	7BY	90
3FP	175	7BJ	50
3QV	165		

Section E

R. Thompson, WIA-L2159	315
D. W. Shepherd, WIA-L2033	255
B. Carroll, WIA-L2074	125
E. Trebilcock, BERS-195	530
J. Jobson	360
I. Thomas, WIA-L3065	345
R. Loutit, WIA-L3064	300
D. Grantley, BERS-1002	290
C. H. Thorpe	255
C. Hutchesson, WIA-L5031	770
W. Clayson, WIA-L5015	465
Miss O. Martin	355
R. E. Rogers, WIA-L7004	610
R. A. Geeves, WIA-7001	515
D. F. Ford	110

Ineligible:

B. Eastwood, RA2675	
---------------------	--

Today, from every source, we hear comments regarding the shortcomings of various organisations. These comments are, in the main, due to the fact that all concerned are not being kept fully informed of the organisations' activities. This lack of communications is becoming a major world problem, so you are not alone when you think "I am not being told what is going on."

It is ironical that Radio Amateurs, skilled in the art of communications, are apparently lacking adequate lines of communication, as today we do not read overmuch of our fellow Amateurs' activities in the pages of "A.R." You may consider "A.R." is dull and lacks brilliance, but remember it is only a mirror reflecting what it receives.

The pages of "A.R." have, and always will be, open for fair comments.

So why not make our hobby more active by commenting upon what you desire in the pages of "A.R." If practicable your ideas will be adopted, if impracticable you will be advised why the idea was not proceeded with.

A hobby is run by people who have aims, achievements, failures and feelings. Let us make "A.R." reflect the true team spirit of Amateur Radio. Let us get things moving, have something done, rid ourselves of the idea "the other man will do it."

★

Most intrigued by the suggestion (April "A.R.") that the "Call Book" has a classified section.

★

Have been trying to imagine the effect of a Pansy covered page.

■

To whom it concerns. A bull IS a strong active animal capable of going on for effort and effort and effort.

★

Nice to hear on the air. Offer from one Amateur to another not so fortunate one to build him some equipment—and at no charge. Amateur Radio is a friendly hobby.

★

Black mark to the character who heterodyned the VK7 Broadcast. Suggest OM that if you feed your oscillator on raw a.c. you will do a far more effective job. If you care to read the literature you will discover there is a lot of technique to be learnt before jamming is effective.

★

Congratulations to the 14 Mc. high-speed v.f.o. driver. Man, you sure can drive. Suggest you get your brakes relined, as you pulled up several kilocycles outside of the band edge.

73,

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- ♦ The ORYX long life element will outlast several bits which are of tight push-on fit.

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Model 6a 3/32" (Push-on)	6	6	0.25 oz.	6"	As for Model 6 (for extremely delicate work only).
Model 9 5/32" (Push-on)	6, 12, 24-27½	8.3	0.25 oz.	6"	Hearing Aids, Radio and TV Sub-assemblies, Coils, Electronic Instruments, Model Construction, Electro-Medical, etc.
Model 12 3/16" (Push-on)	6, 12, 24-27½	12	0.5 oz.	6.25"	Radio, Television, and Telecommunications assemblies.
Model 18 3/16" (Push-on)	6	18	0.75 oz.	7½"	For heavier work, heat capacity equivalent to that of most 80 watt soldering irons.

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Isn't a call-sign book for members of the I.R.A. It is the copybook of the Postmaster-General, and a record of all those who have passed the necessary examination and given call signs. And has no class, race, or creed distinction. Neither is it compulsory to speak with a cultured voice; it can be with any kind of accent or tone, sanctimonious, Scotch, Welsh, Irish, or the accent I have cultivated, a Pommey accent.

Let us forget the Pink Page section, endeavour to get on the air as much as possible, get to know our country, Christianise it, take an interest in any hobby he may have, an interest in his family, in the traditional friendly spirit for which the Amateur is famous all over the world. Above all, endeavour to keep abreast of the science and always willing to give that friendly, helpful advice to the young enthusiasts who are receiving their licence and switched on the transmitter for the first time.

—Ern Ashley, VK2ASE
"The Chinese Laundryman"

Editor "A.R." Dear Sir,
I think that the Radio Amateurs know me as a very interesting listener and a regular user of the Call Sign Book. As such, I wonder if I may be allowed to voice my humble opinion in answer to Joe VK2JR's letter regarding "Pink Pages" and the deletion of titles in the "Book".

Basically, the suggestion of listing hobbies, etc., I think, is a good one, but what useful purpose would it serve? One would most certainly find some kindred spirit among those listed, but such a list ensures such a contact. Until that spirit decides to give a CQ, or switch his receiver on, does the searcher call his head off for VK000 and talk to nobody? He might wait forever for that particular "spirit" to appear just at the right time.

Judging from many years of listening, it is mainly the same call signs I hear of 40 metres, and they have contacted each other so many times, that each knows the other's interests anyway. If hobbies were listed, why stop there? Why not list blind, legless, polio victim, etc., even photos? The "Pink Pages" would soon get out of hand.

A simpler way to overcome the problem of unknown Call Sign names (which all Radio Amateurs live by) would be, I suggest, to print the name, instead of just initials, against the call sign. Bob VK2JH has used this system for many years, and in contact with each new station, the name of the operator is entered in the Call Book. All he has to do is find the "Book" and the name is there.

Regarding the deletion of titles, I say "Leave them there, please". I, for one, like to know I'm listening to a "Doctor" or a "Reverend" gentleman, even though the "Doctor" may be only a Bachelor of Medicine. At least I know he is a medical man and has given many years' study to that subject.

I think I can safely say that at least 75 per cent. of the whole population of Australia do not know, nor care, that their favourite "Doctor" may not be entitled to that name. As long as he gives the right medicine at the right time, removes their appendix or gall bladder when necessary, he'll always be, as far as they are concerned, a Doctor.

If Joe would like to be listed as "Professor" Reed, it is OK with me, because I think, he is quite entitled to that distinction, as I have yet to hear on the air (or off), another person discuss at such length and on so many, and such widely varied subjects, ranging from the simplest (which even I can understand) to the most scientific.

Daphne Meadows (Mrs. VK2JH).

John Murray Moyle AN APPRECIATION

This is the text of an "Appreciation" given by Graham Hall, VK2AGH, from his own station as part of the VK2V1 Broadcast to members on Sunday, 20th March, 1960.

It was my privilege to be present at the simple and touching ceremony held last Saturday to pay tribute to John. As I sat there amongst his family and close friends in prayer and watched John pass through the portal from this world to the unknown beyond, a flood of realisation came of the tremendous life which the Great Architect had ordained should be taken from me. We none of us knew the reasons for these happenings but believe me there is a reason which one day will be unfolded to all of us. John was probably one of the best technical journalists this country has ever known, his lucid thinking and enquiring mind led him along paths which few of us have ever travelled. His journalistic talents are forever engraved upon the technical and editorial of Australian literature. He did a magnificent job in building to its present-day stature the magazine we all know and love.

In addition to his literary achievements, he was also a top grade engineer upon whom was bestowed Senior Membership of the Institution of Radio Engineers (Australia), an honour which is not given lightly, and was of the I.R.E. will miss the help and assistance which he extended to us over the years.

Another facet of a very full life was his complete devotion to music, as all of us who appreciate good music know, his Record Reviews were a feature to look forward to each month. He was a founder member of the Sydney Recorded Music Society and shared in the regular Sunday evening broadcasts "Serenade to Music".

We all know some of the details of the last 12 months when he represented us as an accredited member of the Australian Delegation at the I.T.U., where he found our difficulties where he set an example envied by all the world's Amateurs, where he battled against almost impossible odds before the I.R.E. was able to earn the support and respect of the entire Australian Delegation. Let us sit back and ponder, and remember the words of our Federal President in the days before describing the almost hostile reception he met in early discussions. That this hostility was broken down is, in a large measure, due to the tactful handling of the situation by John who not only had a full grasp of Amateur requirements but its place in the entire frequency spectrum where the whole world is clamouring for frequencies which are already near saturation.

It is an education to tune across the spectrum occasionally from 2.5 to 30 Mc.—there is hardly a spare kilocycle in which to fit another signal. Let each and everyone of us continue from where John left off, let us all make use of Amateur Radio a little and see the tremendous impetus it achieves in a very short time. Let us quote from the letter by Mr. Walker, VK2CJA, who was at Geneva for the I.T.U., and who says: "John's friendly discussions, clear explanations of the true meaning of Amateur Radio and his interest in the problems of the other services had a great deal to do with the outcome in my opinion of the Amateur Radio allocations negotiations at the Conference".

John Clarricotts, Editor of the R.S.G.B. Bulletin, has this to say of Geneva in general and John Moyle in particular.

"Why was it necessary for the R.S.G.B. the A.R.R.L. the W.I.A. and the I.A.R.U. to spend large sums of money in sending representatives to Geneva? The simple answer is that if the Amateur Radio movement had not been fully represented at the Conference by experienced amateurs, matters would have been different. Now enjoy would have been lost for ever."

Whilst discussing the 14 Mc. band and the proposed Australian reductions of 100 kc., of John he says: "The fact that the proposal was withdrawn during the Conference was due in no small measure to the work done behind the scenes by the W.I.A. representative attached to the Australian Delegation."

Let us learn from the experience John gained at Geneva and so capably committed to paper at a cost to himself few of us will ever know

It was only his indomitable spirit which carried him on until the job was finished.

Let us heed John's words on organisation at International level. More important, let us note what John has said: "We fell down because our preliminary work over the years was not good enough." Does this not show the necessity to submerge our State differences to evolve a Federal set-up which will strengthen Amateur Radio in general and the W.I.A. in particular?

Again let me urge you to read and re-read John's report of the I.T.U.—two paragraphs which are indelibly etched on my mind, firstly "All our excellent and often elaborate I.T.U. national set-ups will be of little use if we have not the hands to them, and secondly, the key to the whole report is: 'I believe that every Amateur who lacks his licence to the wall must shoulder the inescapable responsibility to his fellow Amateurs and to Amateurs of the future, if he fails them they must suffer and may even cease to be'."

I am sure that each and everyone of us join the President in extending to Mrs. Moyle and her daughters our deepest sympathy for the loss of a loving husband and a devoted father.

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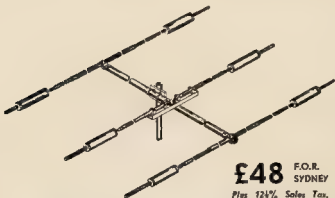
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MARKET NEWS

VK2.—I have an apology to make to the VK2 Group. Tim sent me his notes for the March issue but they were too late and since then I have mislaid them. So I will take some notes from his letter and the Bulletin.

Tim is standing for the VK2 Council this year and will not be as active in the S.W.I. Group, but will act in an advisory capacity. Sorry to hear that Tim, but glad to know that you will still be around. These elections were to be held on 8/4/00.

At the Kirch meeting they held a survey of the members. The questions asked were Name, number, bands used, mode of reception, converters, antenna systems, if QSLs or reports used, countries heard and confirmed. A report was made at the hobby. A good idea, and Tim will put results in next month.

The annual meeting of the Group was held at the club rooms on Friday, 8th April. There was a good attendance and after the general business the sections took over. There was no trouble filling all positions. As the business concluded, the meeting went on hour or so watching slides.

As the retiring Secretary I would like to thank everybody for their help last year and hope that the new committee will receive the same co-operation as we did. We are still intending to produce the S.W.I. Handbook for our own members, who will be further notified in the near future. TS, Tim Mills, VK1ZTM/W1A 13051

New Committee President, Phil Irvine, WIA-L2150; Vice-Presidents: Barney Smyth, WIA-L2001, and Allan Chatto, WIA-L2185, Secretary, Gerry Albeck, WIA-L2011, Assist. Sec., Ron Smith, WIA-L2003; QSL Manager, Barney Smyth, Publicity Officer, Reg Wood, WIA-

L3057, Liaison Officer, Barney Smyth; Club Room Rep., Joe Pollock, WIA-L3156, Dural (VK2WI) Rep., Maurice Gascoine, WIA-L3083, S.w.I. Advisers: Don Grantley, WIA-L3023, and Tim Mills, WIA-L3062.

VK4.—Bill Davis is in hospital at the moment. Has had an operation and the a.w.l's. all over VK wish him a speedy recovery.

W. W. Wiley, Riere, a lawyer from Los Angeles, has a list of other members in the S.E. of S.A. with their number, name, age, rx, antenna and any other projects. We have not been in contact with the other members in the S.E. of S.A. since we have been trying to receive a No. 19 set here and have been trying to fix it so activity has been less. Have logged 13 call areas to date but have only received 10. We have been working on a limited number of cards have been sent out. Dale L5028 has just completed a car radio and is very pleased with the results. A two-valve portable car radio is being built and tested in it, with excellent results and will forward circuit if you are interested." Thanks, Dale. Will try and contact some of the sw's. in Illinois and may be able to get a few more sw's.

VK7 Group.—The VK7 Group had quite a night for their March meeting. To start with the Secretary was late! 40 minutes to be exact, and he can truthfully blame the Hobart Bridge this time or at least a nasty accident.

When I arrived there Len VKLE had we and truly started his lecture on "Converters". As I remarked in the Feb. issue, when Len gives a lecture even I can understand it—well this one lasted two hours and Len gave us the works. He not only dissected converters but also threw a lot in about r.f. stages and oscillators, finally winding up at about 10 p.m. Thanks Len for a most enlightening and interesting lecture.

We welcomed three visitors to this meeting and hope to see them along at our future meetings. Eight members were present and congratulations were extended to our President in passing the theory and rega. at the last exam.

nd 20 mm opening
L's. Makes one's

Use's and H.L.K. makes one's mouth water doesn't it. Well that is about all for now chaps except I would like a bit of material for the mag from you Northern chaps. Maybe

Now for some interesting information from our friend, Don Grand, of Grand Rapids, Michigan.

This month we list the 100 OK Award, issued by the Central Radio Club, Box 68, Praha 3, Czechoslovakia, to whom all lists and cards should be sent. The requirement is 100 QSL, 50 percent OK stations, any combination of bands and modes of transmission may be accepted. Cards must refer to reports later than 1st January, 1954, and the award, which is free, can be made to non transmitting stations only.

UASKYA in Zone 23, audible on 21 Ma.
c.w at about 10 a.m. E.S.T. UASAA is in
Zone 17. ZAIAL is most likely a pirate LC03
QSL via Norwegian R.R.L. ZSTL Box 8, Hlati-
kulu, Swaziland. SNIGW usually on 29. mx
s.s.b. Glen Ward, P.O. Box 9136, Washington,
D.C. Reverting to UASKYA for a moment, he
will be on s.s.b. from Zone 23 in the very
near future. There is a good chance. Other
s.s.b. stations promised are KAABO, an FBA,
and SNICJ (most likely on by the time you
read this), whilst UJBOJ recently commenced
using that mode from Zone 17.

Sideband Activity—It should be no trouble to earn your s.w.l. DXCC via this mode before long. The "Worked 100 SB" Award from "CQ" now has over 100 members, amongst whom we note VK3AHO. There is little doubt that s.a.b. is responsible for the increase in s.w.l. stations of late, and with such countries as TI, PY, TG, VQ4, HB, YV MP4B, KZ3, 4X4, UP6, ZK1, MP4T MP4Q, HAS, PZ, VK0, VQS, UT8, CG, LU, VU2, SK2, SM2, there is a distinct possibility of many of us earning our DXCC with all modes.

A final word about SNI stations in Nepal. They are NOT DXpedition stations, but are a hard working party, despite much talk to the contrary. There are only two stations active—GW and CJ. All others are pirates, who had a great old game while it lasted.

The recently published A.R.R.L. Country List shows VK7 as having separate country status

shows VA7 as having separate country status.
This is not correct.

QAL COMMENT

It is very gratifying to receive a card such as the one BERNIG received from Dave ZIMMER recently, not because of the nature of the award, but because of the commendation Dave makes about a.s.w. reports in general. It is most heartening to receive such a card of this nature from such a well known Amteusur as Dave. He speaks very highly of the VK3 award report form which, together with a standard a.s.w. card, was used by Don in his report. Very deplorable to note, however, the carelessness which is evident in some of the cards from the U.S.A., many of these being received with a splash of airmail stickers and stamps, however, and without any detail on them, making them useless for award purposes.

A word to those of you who belong to several radio clubs such as I.S.W.L. W.I.A., C.Z.A.R.T., S.S.G.B. etc. When sending cards to the contest, please use only one club call sign. The reason being that most societies will issue awards only if one call is shown on all cards, thus if you submit a 100 cards with the I.S.W.L. and their W.I.A. some of which you should use BERS111 while the others L0606, you will find yourself looking for a new batch of cards to make up the number 25. This information recently appeared in "Memorabilia" and is worth passing on, especially when some chap queries our motive in using BERS call signs.

How do some of you chaps find the G calls when it comes to replying to a.w.l. cards? BERNARD has during the past three years sent 36 cards to the British Isles—for only one reply. He finds the Russians are the most reliable at returning, that is other than the VKs, the latter with few exceptions are very obliging to a.w.l's.

THE LADDER

	Heard	Confirmed	Zones
BRERS195, Eric Trebilcock	199	238	40
BRERS1002, Don Grantley	199	83	281
Rd of Balfour	188	108	26
L3053, Maurice Cox	172	38	18
L3074, Mac Hilliard	187	50	
L3085, Jan Thomas	118	18	13
L3113, Mike Ide	85	27	
L3072, Tom Haywood	73	3	
L3066, Ian Woodman	4		1

OVERSEAS SCHEDULE

I have on hand here the latest schedule from Radio Sweden. All times are in E.A.S.T. English language daily

2230 2300 to the Far East, 15240 and 9620 Kc.;
9945-2115. South Asia, 15240 and 9620 Kc.;
9215-9345. Middle East, 15240 and 11705 Kc.;
9345-9415. Africa, 15340 Kc. 9845-0615. Africa,
Europe, 15340 Kc. Europe, 7310 Kc. North
America at 15145, 1315 and 5000 on 27860, 12815
and 9620 Kc.
From Keith Roosevelt, Warrnambool, 'Vic., the
following Kenya 5400 B.C. News, 4885 and
4890 Kc.; Zanzigaryia, 0600, News English, 5556
Kc.; Radio Beira, 0700-0730. East, 6020 Kc.
Radio Persia, 0700-0730, English, 6200 Kc. (not
daily); Radio Ankara, 0700-0745, English, on
9745 and 15160 Kc.; National Civil Defence
Philippines, 11 p.m. close on 3385 Kc., 12 p.m.
close on 9600 Kc.

SWL

Maurice Cox, WIA-L3055
Flat 1, 37 Boyd Crescent,
Olympic Village, Heidelberg,
N 23 Victoria

that men again with the news in Australia. Not many letters only the usual from VK7 and VK2, less from VK3, and mail had two enquiries from a VE1 re awards. These two letters by Don Grantley Don Macme at least once a week with ideas, some of which will be future meetings.

the VKS Council, approval has been given for us to hold two meetings. The first of these will be held on 15th March and will take the form of a constructive discussion. The general meetings will be held on the 1st Friday of each month.

few letters. Firstly from Tom
12; who is still having trouble
and has it back with the agents.
comes back OK Tom. He has
y of a 400 page catalogue from
land; what a book!

[illegible]

I mention here to all you a.w.P.s. interested in Contests that in February we ran a Log Africa Contest organized by the VK3 Group. The winner in Feb. "A.R." I received only 10 votes all from VK3: Eric Trablcock, and myself. Eric won the Contest, I myself second with 28 points, and with 12 points.

to mention here some comments
BERS198 I quote "Here is my
As you already know, I am
with the haphazard way in
we were worded. I submit my
for the sake of being in it. I
Africans calling CQ and calling
ut QSO!" Eric's best news was
received a QSL from ZL3VH/3
This is his 349th country con-
tacts, Eric

cards from VK8IT and VK0CC, and W5CST/KH5. He is onto an-
tic s.w.l. in his area. Hope you
Congrats. on obtaining your
at the January exam. I believe
ing on 2 mx and then later to 6.
keep an interest in the VK3

ers here from Grease Manu, of
in. He and several other boys
in forming a group at the Col-
written to them and told them
Hope you are successful boys
ke to see you along at our

Des Smith, another newcomer
to the Group.
I believe this station is a
new one, product detection makes
sense on a.s.b.

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" 66 MD	£9/3/0
" 67 MA	£11/3/6
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by reports, was made from VK9 to VK7 and from VK6 to ZL, and remembering that the broadcast was arranged at three days' notice without recourse to P.M.G. landlines, the effectiveness of Amateur communication was demonstrated and is of no little significance in relation to national emergencies.

Throughout the year a varied programme was presented to members and the list presented below surely deserved better support from members. The average attendance of 22 is surely not indicative of the interest in Amateur Radio in this district. March, June and October were fine nights, whilst in April the late John Moyle demonstrated Stereophonic Sound. Max 20T showed what you can do with Command receivers in May, the same night President Dave gave us an address on I.T.U. In July and December, Leo 2AC lectured on Selectivity in receivers and "Cheap and Easy Sideband." Lionel 2CS was in his hobby-horse on a.s.b. 1st September was Frank 2FX's turn on Television Receivers. Frank 2QL held interest with his information on Prediction Charts and also but not least, three locals—Stuart 2ZDF, Lionel 2CS and Varley 2SF—between them gave a varied discourse on this and that.

Whilst in Melbourne, I was fortunate to have several busy years with your Federal President, Max Hull, and was given an insight of the trials and tribulations that confronts P.E. especially those of Secretary who has not been able for the past eighteen months. Whilst sitting down in the Exhibition Building watching a mannequin parade in connection with the Moomba Festival I purchased an evening paper and it was then I read of the untimely passing of one of our old friend, John Moyle. Expected, of course, but quite a blow. Did not visit any other Amateurs in Melbourne, but called and met for the first time an old friend of many, namely, Roy Parker, the Minister of East Malvern.

In Sydney, I made the acquaintance of the three Goons—George 2AZE, Jack 2AAT and Ivan 2ALM. Wonder who pinched Bill Hall's car as the Yrungs advert—the sketch of car and occupant bear no resemblance to our Will—too much hair; anyway, the whip is centred. Was able to attend the Divisional Annual Meeting when only a little over fifty were present. Like our Branch, Council was elected unopposed, which in my mind is a sure sign of disinterestedness—no wonder we are losing our bands. Congratulations to the new President, Ted 2ACD, and his merry gang. Of course I sat behind Muriel 2AFA to keep her in order amongst all the men.

Sorry to hear that Frank 2FX broke his ankle in Albany; thanks to Amateur Radio, namely 2ASA via 2SF. Doug was able to visit him and cheer him up. From the disturbance on the ether, Bill 2XT is now sold on a.s.b. Varley 2SF no longer known as rough-note-radar since he found out that the reason why his power was down was that an 886 gave up its ghost. Keith 2AKK, the Bolten Boy, is now putting out quite a respectable signal—even 2ZL can copy him. Ernie 2FP recently proved that ceramic sockets are no good for a.h.t. in t.v. Did you know that Varley 2SF spent hours in checking his rx only to find out that old 501 was having trouble with his spots? Wasn't it a thrill to hear Ron 2ASJ speaking so well the other Monday night, keep it up Ron and we will let you join the Goon show.

Well chaps don't forget the next meeting at the Verity on 13th May and also remember that the House of 2H is again on for all comers each fourth Wednesday of the month.

VICTORIA

Had an enjoyable evening at the Annual General Meeting of the Division. The President read the annual report, highlights of which are quoted here.

"The membership at the end of the financial year was 990.

"During the year a considerable amount of work has been carried out on the two BC610 Transmitters in order to bring them up to modern standards of shielding, etc. It is hoped that they may soon be put into service as VK3WI for use on the Sunday morning broadcast to members. Our thanks go to Jack 2ALJ, Peter 2ASJ, Ken 2AWJ and Fred 2JYS, who have put so much time into this project.

"On the v.h.f. side, Bob 2ZAN, John 2ZAJ and Michael 2CZC have the matter in hand, ably assisted by the V.h.f. Group.

"This year for the first time the Western Zone were hosts for the Annual State Convention, the Tenth, which was held in Stawell. The guest of honour at the Convention Dinner



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was the Mayor of Stavell, Cr. Hallam. Our thanks go to Bill 3AKW and all the helpers in the Institute for the work they put into the preparation for the Convention.

"In May '68, Amateur Radio was brought before the public eye when Bert 3JDS operated his talk from the Morwell High School during their Fair.

"After many years' service to the Institute, Jim 3NY has found it necessary to resign as Treasurer and to leave the Institute. I would like me in giving Jim our heartfelt thanks for all the work he has put into the Institute in the past. Our new Treasurer is Keith 3YQ.

"Our thanks go to Noel 3ZG and Ivo 3XB for their smooth efficient operation of the Inward and Outward QSL Bureaux. Due to an increase in postal charges, it has been found necessary to increase the charge per card from 4d. to 1d., thus a sheet of 100 stickers will cost 8/4. Even at one penny per card, the W.I.A. QSL Bureau is a very cheap way of distributing cards.

"There was a renewed interest in W.I.C.M. activity in the latter half of this year, and as there is no Civil Defence Organisation in Victoria at present, it is obvious that we must have a basic network in operation before we can make alternative approaches for recognition, to that end the S.W. Zone network has already been set up.

"I wish to thank the Councilors for all the help they have given to me throughout the year, and also to bring to your notice the fact that the Institute has elected a new President, Honorary Secretary, Jay 3JL, and the Federal Councillor, Alan 3AEL.

"In concluding this report I would like to emphasize the importance of your continued whole-hearted support of the Institute, as in these times the Amateurs of Australia must speak with a united voice. To that end I hope you will all do your utmost to recruit new members."

No election ballot was necessary and the meeting proceeded to recommend office-bearers. 3JW was unanimously elected President with 3YB and 3AC Vice-presidents, and 3YQ Treasurer. 3ZEG and 3ZCG were welcomed to the Council.

We have our deepest sympathy to those brave souls who are now VK3 Council.

The ordinary meeting followed, and was far from dull. It was agreed that VK3 would send a delegation to the Executive Committee meeting of Federal Council to discuss the I.T.U. Conference.

A one-minute silence was observed in memory of the late John McKie, VK3JU.

The action of the VK3 Council in proceeding with repairs to the Institute Rooms was endorsed. Regrettably these repairs could not be carried out as they were due to the earth tremor several "sleep" backs.

One brave soul adversely commented upon the VK3WJ Broadcast's lack of news. This triggered off a chain reaction and a rush of words resulted. Some persons quickly commented and had quite quiet, but well directed shots at others present. Wise council was heard and soothing noises came from various sources. Soon many sources dried up and to much laughter, we gradually clarified matters. After the dust had subsided and the "volunteers" returned to the floor, and removed their straight-jackets, it was said they would be only too glad to help. So scraps we now have a VK3 Sub-Editor and 3WJ Script Editor as they were all there.

After the close of the meeting all present then discussed the way things should be done, and "if I was doing it . . ." well you know how it is. The last of the evening went home after an enjoyable night. Now about you coming to the next meeting? Oh well, back to the assembly. (They only let him out for the Annual Meeting. Editor)

SOUTH WESTERN ZONE CONVENTION

During Saturday afternoon visitors arriving by Ballarat were welcomed and directed to a shack of interest around 8.30 a.m. All guests gathered in the Ballroom at Cook's Private Hotel, Sturt Street, for a ragchaw after 7.45 p.m., the 53 present sat down to a turkey dinner which was quickly cleaned up between mention or modulation, final etc.

On the 11th of the Dinner, the 41 Hams present settled down for the usual Zone meeting and the 12 XYLs buddied in one corner to produce some solid QRM. When the meeting was over, the 41 Hams and the 12 XYLs 3AMH and Jan, his XYL, who were guests of honor for the evening, provided a very interesting lecture with color slides on their recent visit to the States where all through-out at 12.30 p.m. by a very sleepy but tolerant hostess.

After such a late finish, Sunday's early start -8.30 a.m. at Lake Burrumbidgee-wasn't. Starting event, an all-band scramble, was therefore deleted, and the prize for this event, a "150 watt c.w. transmitter," was awarded to Jim 3ZGG for his sterling effort in losing himself during the 2 m.m. tx hunt. He also found the prize "Ultimate Jim" the 2 m.m. tx hunt was won by 3ZEG but since Michael is not of the S.W. Zone, he was given a consolation prize and the Perth Perth Zone members awarded to the runner-up, Dick 3ABK.

Jim 3ZGG made up for his bad start by winning the 2 m.m. fox hunt, after finding out from the other starters what to do, and was again on the beam in the second blindfold tx hunt. The first blindfold hunt being won by Peter 3LAF.

A picnic lunch was provided by the Ballarat XYLs for those who required it and very nice it was too. The 2 m.m. tx hunt was won by Michael 3ZEG, a good effort to make both hams. Ron 3ZEX surprised everyone by winning the all-band scramble held as the final event for the day. Ron, using 6, 2 and 1 m.m. gear, made eleven contacts, so the 1.1. boys were very happy. Kevin 3ABK, won the best turned-out mobile event and Dick 3ABK won the "noise generator" for his entry. Hope the junior ops like it. Dick.

After a good and plentiful afternoon tea, gear was auctioned for funds and the prizes for the various events were given. The blindfold hunts and are mentioned here as an inspiration for future events. A loud hailer in the capable hands of Bill 3AMH was followed around by a band of music, playing Hams, much to the amusement of XYLs, harmonies and another party nearby.

To keep the harmonies happy, a lucky dip, a ball and books were provided. (Free). The XYLs drove nails and raced for glory. Ballarat turned on its "usual" (?) glorious sunshine for the day and each and everyone had a very good time. See you next Convention.

MOORABBIN AND DISTRICT RADIO CLUB

At our April meeting, Max 3ABO gave an informal talk on some very interesting projects which he has in hand at the moment. One which drew a lot of comment was a simple Capacity Bridge whereby small condensers of unknown value could be identified by a shunt which can be easily and quickly identified by, firstly, adjusting the bridge to dip, and then simply reading off the capacity from the dial. Another project was the use of a simple watt transistered amplifier using easily constructed transformers and a minimum of parts.

The 80 m. tx hunt was won by Bob 3NZ, Arthur 3AB had the 100 watt test set using a cunning approach, though simple in hiding the tx. He hid it in his shirt! What a man!

The Barbecue in April was an unqualified success, it being a glorious night, weather wise, and those who attended enjoyed their steak, the coffee, and the good cheer and good fellowship. There should be more of it, hi!

Our fellow member, Morris 3AMA, is still carrying on his work as a signwriter, but those of us who have visited him report that he is very bright and taking things very bravely. Our hearts go out to him.

In May a party of members will visit Digby, where the Annual Convention will be held. It is to be a picnic event so should be enjoyed by all those who participate, as was the visit to 3ABK. Had the services of Wes 3ABK, who showed us all the way to be seen. Dick 3DM something that we all appreciated to the full, and our thanks go to Wes for such an informative and useful trip.

Don't forget fellows that we meet at it College Oval, Black Rock, the third Friday in every month at 8 p.m. Visitors are always very welcome.

QUEENSLAND

BESSEANE AND DISTRICT

Well, I must say, the 1969 Annual Dinner was the best for years, in fact, it was the best in the present sunspot cycle. The Dinner was held at the new Anzac House at the smarter end of Wickham Terrace, the room was beautiful, the food was superb (possibly 40%), the service was as good as our Christmas "Dinner" and every seat was paid full. Some competition for years, in fact, it was the best house down. Frank 4CZ made a "mystery box" which had four terminals on it plus a switch and the idea was to guess what it was. The help of a member was supplied. Your scribbles were the only one to venture a guess and Frank had me open it when the

mag finished their inspection. Before I tell you what it was, I'll tell you my guess, it appeared to have that characteristic change in resistance across the terminals which you normally get when you check an electrolytic but had the same effect when you reversed the leads of the multimeter. The other two terminals had a small resistance with the switch. In one position and a short in the other. My guess was two electrolytics wired in parallel with a switch to the switch, and a resistor and other a resistor also in parallel. Gosh, my face was red! It was a cake of soap with the leads forced into it, a resistor across the terminals, a switch to the switch, and the whole soaked in water. I'll keep my mouth shut in future!

At the April Council meeting the election of Council for 1969 took place and Stan 4SA took the job of Secretary and I know of my four year tour of duty in that job, he will really do a wonderful job. Stan has formulated a card index system which will make it a foolproof job. Arthur 4AW gave up the job of Federal Councillor after more years at the job than I can remember and this position was taken over by Stan. I will take over the Traffic job Arthur held. If he does as well in this job as he did with 4WI, we will have my worries. He did job of Station Manager for the Brisbane Branch and I know 4WI is going to remain in efficient hands. Graham 4LW kept the Treasurer's position and my District Secretary, the Manager, Jack 4JP. Ron 4RL retired from the Outward Bureau and it was taken by Ron 4ZEB whose QTH will be printed in "QTC". The District Secretary, Fred 4VB, now has the position of Technical Librarian. This was the last position John 4TP held after so many years on Council. I did not know of his retirement. The Council has asked me to thank him, in this column, for wonderful work he has done for the Queensland Division. Thanks from all of us, Johnny.

You have probably heard by now that I was elected to the job of President in a very close ballot with Bruce and I wish to tell you that I am very happy to be doing this. My predecessors have set a very high standard in this position and I know it will be very hard to maintain, but I will try to the best of my ability.

Council is now preparing for the Palm Beach Convention and we will give you details as they come to hand. Keep the Queen's Birthday in mind and free because we want a good attendance.

On the fringe area t.v. we are pleased to hear that a big conference will be held on this problem in the near future. The Executive will clear up the whole business to the satisfaction of all. T.V. has its problems for everyone and it's a very easy to pick a "vicki" in Brisbane close to people with rectangular eyes and you know they indulge in hours of viewing every night.

I couldn't resist that one so while you are cursing me for it, I'll QRT for this month.—4FI.

TOWNSVILLE

It was with deep regret we heard over the W.I.A. News Bulletin on Sunday, 12th March, the passing of John 3JU, coming so close to the 50th anniversary of his becoming a radio. We had looked forward to hearing his views at the 11th of the Conference. His foresight in propounding of Amateur activities will be sorely missed.

A few of the boys discussing John's passing, over the book-up, came up with the suggestion that F.M. be petitioned through the usual channels that a special levy of 2/- be imposed on all members each year till next 1st July. Conference when we again send another delegate to represent us in Region III, as a tribute to the memory of John 3JU. Money collected to be invested till required.

A motion to that effect has been sent to 4WI, duly seconded, and to be discussed at the next meeting.

Wonder if our old boys get the kick out of just listening to ragchaws and discussions on various subjects on the various bands. It is wonderful to just sit back and just listen, incidentally, it does help in knowledge on a variety of doings in all countries. I often get quite a lot more than I operate.

Claude 4UXK back again in the fold and promises to put his shoulder to the wheel again. He is full of eight doing the next exam. Best of luck boys. 4CZ disposed of his old radio before leaving for the "Old Dart". Experts to be away two years. Bring back some of that equipment. I'll be waiting for you, I'll be awaiting delivery of new rx. Then watch his score of DX rise sharply. His side-kick, Frank

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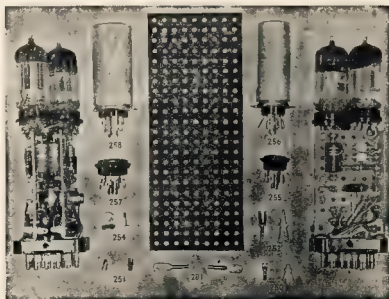
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4PP is worried with downward modulation on his meters.

Ernie 4EL and Len 4GD speak over the back fence to Mr McC and leave adjourning to the corner shop. John 4DD heard on a.c.b. getting a DU for report on antenna. Bob 4CR asking bug-eyed, waiting, and waiting, and waiting, waiting, for a picture to arrive, hence not much time for hamming. Ken 4ZAK is putting the screws on for me to finish the 144. Doug 4ZBM vying each other in working KHzs and all ears for KGE to break through. Call me and I'll be there. Speaking of love, love.

There is a rumour on the "Kookaburra" 1 a.m. session that Frank 4FN called in at 7.52 a.m. while one chap (guess who?) was holding forth in the pulpit and returned home at 7.55 a.m. time in time to be called in as next in turn to speak. Where can one buy those "I am still" and "timers"? Speaking of love, love, don't forget to pause occasionally and announce your call sign, it only takes a micro-second and may save that Pro Forma B.

The local Federal Member is to be interviewed to solicit his support that we do not lose any of the frequencies we fought for at the end of the 1960s. I am sure we can get our frequencies for domestic reasons unless we are prepared to use our strength.

SOUTH AUSTRALIA

The monthly general meeting of the Division was held on 1st May, that it says, none other than the VK3 Division was held in the club rooms to a more than capacity audience. So full was the room that everybody had to be brought in and was being 4ZBM spilling an odd one or two out into the foot-path. As a matter of fact if I seem to lose track of the meeting at times, in these notes, it is only because, as the police say, I got a little out of breath and found myself gasping for breath on the pavement, and took about five minutes rest and a couple of glasses of beer. I was in the rhythm and beat of the gathering. Just as they buy and sell nights are so popular with me at times, but without doubt the crowd in the room turned in a number of and everybody seems to have a heck of a good time.

My modesty prevents me from suggesting that the main attraction might be the antics and repartee of the auctioneer, his jovial good humour, his well known stock of funny stories with which he entertains the audience prior to the business of the night, his splendid physical condition combined with ripping muscles and Italian catch words, but I can say without a doubt that I am a good auctioneer!!!!

A large amount of gear was offered for sale, some good, some fair and some decidedly on the rag, but everything was sold. I can say no more could be asked than that. Lloyd 50K, our new President, was in the chair for the first time, and conducted the meeting like a veteran. We were well represented by 100 members. An unusually large number of visitors were present including Leyton Catford, D. Smith, Bill 6DX, and others. The 4ZBM from Kadina, Bill 6DX who cannot doodge the fact that he is an old VK3, and Mike 5WVW, who was a friend of Doc 4D, a real old-timer. Arthur Catford, a 30YV, was also present and it must have done his heart good to see the healthy state of the VK3 Division. The 4ZBM were well represented, also attended, and is looking fighting fit, so much so that I dodged him for most of the evening for one reason or another. He had some old ideas about the meeting. As for Jack, the meetings have been a little on the dead side lately, nobody wants to argue with me, and by the look of our new President, the comedy is going to be allowed to argue with me!

An extraordinary general meeting was held for the normal meeting, but as it was a very domestic affair, I am not going to say you with the details, suffice to say that the two vacancies on the Council were filled by Gordon 4ZBM and Bill 6DX. The meeting was held on an all time record by finishing at the unheard time of 11.45 p.m., and when I left at midnight I was the last person to leave. The newly formed Council going on in the corner, and finished in the few small hours of the morning. All-in-all, the March meeting was a record for the Division. I am sure that the next press just how virile and active the Division has become.

Some of the records, the meeting established another record in the fact that one of the members, who shall remain nameless, came up to me and said, "Thanks for the effort in making the Division go on, and for the effort for the newly formed Elizabeth radio club". Before I had time to get my breath back and get my legs back, I was moved on, and I am still recovering from the shock. Just

imagine it, someone said thanks, and quite openly too. I am a success at last, someone has thanked me! That is a record if ever there was one.

The Elizabeth boys are well to the front this month with the news of their new club and their meeting, which, as you may have seen, was a satisfactory one. They have showed promise of building up to a good attendance once the news gets around.

Cyril 4ZBM is a member of the 4ZBM, and has a new beam to scoop the hard ones in. He heard on the SWI call-back on a recent Sunday morning. He is at present engaged in a similar operation on the 4ZBM of his receiver and promises great things for the patient after the crisis is over. Rubby 5NO is looking up his new QTH in Elizabeth Park, which I am led to believe is one of those upstairs joints complete with hot running water, and all mod cons. What some jokers won't do to get their shack a half mile above the earth.

Len 5GK is now the membership officer for the Division and is apparently none the less on the new job, judging by the questions that he was asking over the SWI call-back recently. He is suffering from an f.m. complaint with his transmission, but I couldn't find any f.m. on the signal, nor could anybody else. I know how you feel OM, but tell them that the SWI call-back is a joke.

Ken 5BS is essentially a c.w. man, but if the information that I have received is correct, he has a special modulator for cross-tuning. Ben 5GK is a member of the 4ZBM, and is busy in modifying equipment, to wit, a Super Pro. Where these jokers get all the time to modify from beats me, what about the lawns, the weeds, the painting, the carpentering, the plumbing, the odd jobs, the messages, and last but not least, the dishes. Tut-tut, such language is unnecessary.

Les 5LC heard on 40 mx the other Sunday morning with his well known brand of philosophy. When heard here he was discouraging people from setting up in the 4ZBM, and setting a course, an unfinishing course, toward it. Sound words Les, although speaking of setting up, my good gods have turned out to be behind, and someone else out of bounds. Spare your tears my friends, I say!

It takes all types to make a world I suppose, but I was surprised at the meeting to have a well known member come up to me and say that he was a member of the 4ZBM in the magazine last month, he is not a member of the W.I.A. I was a bit staggered at this and said, "What's that got to do with it, do you think every body is a member of the 4ZBM?" He couldn't see the point and left me with the undoubted impression that I should be sorry to see the members of the 4ZBM have the wrong slant but I have always felt that our grand old hobby is above class, creed, religion or organisations, and whilst I honestly think that all should belong to the W.I.A., if only for the protection it offers, I certainly don't think they are beyond the pale if they don't join up. To me an Amateur is an Amateur, be black, white, or brindle, or like me, a mixture of them all.

Deep sympathy goes to Hughie 5BC in the matter of his wife, and I am sure he will find it extremely hard in writing the notes for the magazine, which appear some four or five weeks later, and very tedious. I am sure the address of others, but it is felt that some reference is necessary, if only for the information of those who would not normally be present in the news, and I am sure I cannot adequately express our feelings. Hughie, and all I can say is keep plugging away OM.

Notices that the Federal QSL Manager is seeking a suitable person to write the notes in my Spanish not being of a high order, and also note that he and his spouse will be treating themselves to a round around the world in the near future. I have a lingering suspicion for a long time that I am the lowest paid member of the literary staff of this magazine, and I am sure that I am not alone in the truth. Did you get a gink at the itinerary he plans, all that smoke-screen about the cost of the notes, and I am sure that it does not bluff me. I am drafting a stiff letter on brown paper to the editor letting him know that I am a wake-up! I am having trouble in stopping the news from getting into the breaking closing reference to the poor-house on his return. Oh Yeah!

Heard on 40 mx the other Sunday that he had spent the night before on the banks of the Torrens. I hurriedly tuned on to avoid corruption of the QSL and was surprised to find that the thing might be OK for Gower but it is not just done in Adelaide. What's that? It is not just done in Adelaide. Adelaide Festival of Arts down there. GO-Hill.

Austin 5WO heard recently on the W.I.A. call-back at his usual good strength and signal. Have not heard him for some time but he has been heard on the W.I.A. and on some DX station at various times. Eric 5WC was operating from the club room at Woomea and has been able to take his DX away permanently based there these days. The new ix is ready and waiting for the concrete bed, and if my information is correct, it is a modified 400 watt, 1000 ohm, 1000 ohm, 1000 ohm, direct at Adelaide, so everybody look out.

Bob 5RI is now a step nearer the a.c., there is a transformer mounted on the nearest pole to him, and he is waiting for the a.c. of thing, but to us who accept the a.c. as an everyday necessity, it is hard to realise what it means to Bob, to say nothing of his hobby of Amateur Radio. The 4ZBM has been paying periodical visits to Adelaide from Crystal Brook, mostly over the week-ends, but so far I have not been into him. Bob 5BC has been heard occasionally on 40 mx, and I have heard him being called by several stations, so I think it is safe to say that he is still an active member of the amateurity.

Ernie 5EN has been exceedingly busy with mobile set-ups, mostly commercial if you get the idea. He has been heard on the W.I.A. a little in his favorite hobby, Amateur, if you get what I mean. John 5ZAZ was a welcome sight at the SWI call-back recently. He was one of the few who came to the club and he and Gordon 5CU had a long chat. He was one of the Northern boys who did such a good job of the 4ZBM, and he was a real find. He came in very handy for the emergency set-up.

Anybody who may have read the description of the monthly meeting could be pardoned for thinking that Norman 5GK was a real find. He was absent, seeing as no reference is made to his sterling efforts as assistant auctioneer. This was purposely done to enable me to give him a paragraph at least to himself. Norman is one of those jokers who is always ready, willing and able to assist in any phase of the Division. He is a real find, and he is a real trouble to him. He bullies and badgers me throughout the entire auction, never gives me a moment's peace, and believe it or not, he has been heard on the W.I.A. at the end. May his shadow never grow less.

Fat 5LD was noticed at the meeting and has at last decided to move in to a permanent residence. He is a real find, and he is a real find. I know how long it will take him to get set up in Amateur Radio, but I will lay a shade on the fact that the first hand 20 bobs up on will be 14 Mc. any day.

What some people won't do to get publicity. Last month I told of the resignation of John 5ZBM. He was a real find, and he is a real find. I was myself in patting him on the back and saying what a grand guy he was. Waiting until it was over, he was a real find, and he is a real find. He has resumed his job as Secretary. Just one example of how Council members together to thwart me.

Brian 5AB is still dabbling in a.s.b., but has not set up on the DX for any longer than necessary for his experiments. His antenna farm is apparently paying dividends. Fred 5ZBM is a real find, and he is a real find. I am not one to talk, I know for a fact that the day his XYL went to Clare he sneaked out to 5CU for a long chat on current topics. He was a real find, and he is a real find. A bill and it would appear that he has deserted 21 and 28 Mc. Glen 5GL is still engaged in the 4ZBM, and he is a real find, and he is a real find. He is thinking of installing a t.v. set in each room to solve the family's disputes as to which channel to listen to. Dave 5AW is one who has been heard on the W.I.A. at the end. I only assume that his interests vary between t.v. and the v.h.f.s.

Gilbert 5GX has forsaken the v.h.f.s. (the a.c. band) and is now heard on the a.c. band. I hope I have the terms right because I am not very keen to all this new-fangled business. He is a real find, and he is a real find. Sid 5ME is at the moment of writing very active, in fact he is very, very active, but not on Amateur Radio. Channel 7 is the one to watch, and he is a real find, and he is a real find. He will continue to be that way for some time to come.

Harvey 5HQ was noticed at the I.R.E. in the 4ZBM of Channel 7 recently. He is not very active on the Amateur bands. Laurie 5CN is back and forth from Woomea these days. He is a real find, and he is a real find. There which is being piped from Port Augusta for the houses. He still finds time to come on 14, 21 and 28 Mc. at the end. The Trustees, paid a visit to the VK3 Council meeting recently and met the members in an informal discussion and met the members in an informal discussion. This is a good idea, because it gives

all members a chance to meet the Trustees in person, instead of only knowing them as names. I am not at all sure what I will veto when I am proposed without any hesitation. If I play my cards right I might be a trustee some day, in the future. Now when I asked him what my chances were to be a trustee, that in his experience of trustees I stood a good chance providing I would consent to be handicapped and not mind being asked to do things I don't like.

Keith SZY can be heard on 40 mx at early evening times and still keeps his VK3 sked. A little noisy these days. I don't think I have a good scheme for avoiding QRM to each other. Keith goes off when he hears SXU come on. It never fails, there has never been a night when I asked him to be a gentleman for you, I bend the knee to you Keith, will almost bend the knee, the joints are creaking these days.

Geoff Sawford, the son of Len SYF, is a member of the S.A. Moonwatch Group. I take a dim view of that Len, seems to show a lack of parental guidance. Must have a long talk with you when I see you again. Murray SBE is at present busy with the Marine Branch in connection with radio at the Lighthouses, sundry other houses, big and little. Have not heard him for some time, but it is understandable.

Joe has been re-appointed as Divisional Traffic Manager since he returned from Alice Springs. His main complaint with the job is that he does not get enough traffic to handle, so what about it. Doc AMD carried on the arduous job during his absence. Carl SSS is busy building a new TX. A little dickie-birdy bird. I don't think I can see that it is the same one that he started to build when he first got his ticket. Tut, tut, and a couple of turtles watch those birds Carl, they have long tongues.

John DDJ is chalk-wielding down at Kings-ton these days and is active on 40 and 80 mx. Have you inverted the pursuit signal of Arch SXX of Lucindale, John? He tells me that he has a signal down there, but I sometimes think he is just saying that. I am about coming on 40 mx one Sunday April, it is quite a busy band these days. That will rock him Brian SXX has arrived at Wilkes Barre. The will be on the air in the middle of 1961. Noticed his engagement announced this week to Miss Gwendoline Donaldson, of Coburg, in Victoria. I don't know how he is going to give him my well-known talk on "DX before Dishes".

Joe SJO has become a self-appointed publicity man for the W.A.M.R.A.C. since he is one of those ignorant serfs who do not know that means, allow me to enlighten you. W.A.M.R.A.C. is the Western Australian Methodist Radio Amateurs and Clubs which was founded in 1957 by its present secretary Rev. Arthur W. Shepherd (G3NFG). An exhibition was held in July last year at which an Amateur Radio station operated with the call sign of G3BMC, and did a marvellous amount of work in publicising the good points of the hobby of Amateur Radio to all attending the exhibition, besides contacting many stations throughout the world. If this paragraph gives you any information, you require, in case you feel dependent about not knowing what W.A.M.R.A.C. meant, you and me Brother, I am one of those ignorant serfs, but not as ignorant as the next one.

Well known old-timer Bobby Bruce (ex-SBJ) is taking things a bit easy these days after having had a warning from his ticker that he was getting a little old. After many years in Amateur Radio he is always interested in the doings of the gang, and will add his little bit of gossip at the drop of a hat. I will be absent from the inch next year because of my annual holidays and fishing trip to Kangaroo Island (no cracks about wearing a hat to keep the sun off your head and of the line has the worm attached), which means that normally Gordon SXU would be writing the notes for that month. This year, however, Council secretary to be there next year has delegated the job to the ex-scribe, Comps SEF. The look of unholy glee on his face as he sits down to write the notes is a sure sign to thoroughly rubbish me is in the air, and whilst it is not my nature to act other than little Lord Fauntleroy at all times, I cannot ensure that I will not be a little bit and all that since Comps met with that accident in his motor car some time ago he has been a little bit of a wreck. Nothing to worry about of course, but remember to bear this in mind when reading next month's notes, especially should my unsolicited advice come up. I am sure that next month they don't call me "Fanny the Pure at Heart" for nothing.

TASMANIA

We all extend our sympathy to Paul TPJ following the death of his father late in March. Paul should soon have his new home complete with Lincideras, and soon, after the same, he should be heard on the air. We will be pleased to hear you, Paul.

On 19th March, about a dozen of the southern members journeyed in Ulverstone for the Annual General Meeting of the Division. As one of those to make the trip, I feel sure I am writing for the others in saying that we thoroughly enjoyed the afternoon and that it was well conducted. For most of us, meeting members from the north and north-west for the first time was indeed a pleasure. Most shacks within reach were visited, most invaded, and speaking personally, that 288 Mc rig at the QTH of TMX deserved much closer scrutiny. I was also impressed with the set-up at TFE. Max TMX is to be congratulated on the way he conducted the Sunday morning broadcast for TVI.

As a result of the elections at the Annual General Meeting, and at Council subsequently, the principal officers for the year 1960-61 are: President IAL, Vice-Presidents TBJ and TLE, Treasurer TCI, and Secretary TFI. TCI has taken over the duties of broadcast officer and is continuing as QSL Manager. We also bid goodbye to Peter, formerly TFD, at the Dinner. Peter, the author of the original P.M.G. Amateur Handbook, is moving to VK4 after a trip to Europe.

Tom has been in New Zealand for more than a month dealing with the problem of vehicular ferries.

At the April Divisional meeting our President presented a report from the Federal Contest Committee Chairman the R.D. Trophy as a result of the 1959 Contest. Tom expressed the view that the trophy would remain with VKI if an equal effort was produced in the contest this year; at the least, we issue a challenge to the other Divisions to come up and fight us for it.

At the same meeting, we were most fortunate to have Mr. Madery, television engineer in the P.M.G. Department, lecture us on Television Transmitters. His infectious enthusiasm for his subject was well met, and of his subject and ability to convey to the packed audience the views he had on the various subjects was indeed a most memorable lecture. We all thank him most heartily.

A few new members were elected at this meeting, and we welcome you to the Institute.

May I remind all members that subscriptions have been due since 1st March. Please send the money to the Treasurer, TCI, so that those who work in an honorary capacity will not have to chase you up for it.

Lee KTC has settled down at Bellville after his removal to Hobart, and will soon be heard on the air again. Terry TCJ will soon be adding QRM to the bands from his Hobart QTH after moving from Huonville. We hope to see you along at the meetings, too. Terry, TJB and TVL were privileged to be visited by Neil GYL during his very short visit to Hobart en route to his new home, 3KU to our April meeting. 13 Jan YZZ.

NORTH WESTERN ZONE

Well here we are once again after a temporary absence in the form of no notes in the last issue "A.R."

In March the Annual Meeting and Dinner of the Division was held on the Coast at our usual meeting place in Ulverstone and I think everything went off fairly successfully, apart from little details we thought of afterwards, but we'll put them on file for perhaps a future occasion.

Lon LLJ, ably assisted by Ken TKA and "Snow" TCH, kept the meeting moving without too many hitches and reports and what have you that go with such meetings were speedily dealt with. The results of votes prior to the meeting were made known, which gave us Tom IAL as our Divisional President for the year 1960-61. Congratulations to you, Tom, and we trust you will spend a happy year in the job.

The meeting was fully declared closed and nourishment in its many and varied forms, in various degrees partaken of by all present; thoroughly mixed, or interspersed with, much talk both "shop" and other. The usual toasts and replies were delicately handled by persons delegated to such duties and the eating part of the proceedings proceeded to a satisfactory conclusion.

Television on a closed circuit was operating most of the evening and I think most beds

present saw themselves on t.v. for the first time. Home photos taken of the gathering using the t.v. flood lighting; haven't heard how they turned out. I don't know whether they were "Ham" photographers or not.

The GSD proceeded admirably throughout the evening with chaps moving round and yarning. As the hour got later, members of the net gradually sighed and pulled out and eventually the tube in the final showed signs of loss of emission, so we pulled the big switch and wrote "finish" in the log to a most enjoyable evening.

The following morning most southern visitors moved out, "running mobile" and proceeded to the QTH of Max TMX from whence the usual Sunday morning broadcast and round-up were heard.

The usual monthly general meeting was held in April and urgent and pressing business was discussed and dealt with.

At least two of our associate members had a shot at the A.C.P. exam. In April, I join with me and wish them the best of luck. Max TMX is beginning to pile up some DX using his new 288 Mc rig, and a splendid rig must be working OK. The question of the month is—when will Terry TIT get his new rig finished?

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